

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Petition of US WEST Communications, Inc.)
for Relief from Barriers to Deployment of) CC Docket No. 98-26
Advanced Telecommunications Services)

COMMENTS OF
AMERITECH CORPORATION

I. INTRODUCTION

Ameritech supports U S WEST's request for relief from the interLATA prohibition, as well as forbearance from the unbundling and resale duties imposed by the Telecommunications Act of 1996, as those measures would apply to its provision of high-speed data networks and xDSL services.¹ The intent and purpose of U S WEST's Petition is to deploy new advanced telecommunications infrastructure. The issue of whether regulatory policies should encourage investment in such advanced data services was squarely answered by Congress in the 1996 Act. To that end, it enacted section 706(a), which requires the FCC, as well as state commissions, to:

encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.²

¹ Petition of U S WEST Communications, Inc. for Relief from Barriers to Deployment of Advanced Telecommunications Services, filed February 25, 1998 (hereinafter "Petition").

² Telecommunications Act of 1996, P.L. 104-104, Title VII, Section 706(a).

Section 706 of the Act expressly directs the Commission to take such measures to “encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.” U S WEST has demonstrated that the actions requested in the Petition are necessary to achieve Congress’ stated objective of encouraging new advanced infrastructure investment. The actions requested by U S WEST are all consistent with and authorized by Section 706 and, therefore, should be timely granted by the Commission.

**II. U S WEST HAS SHOWN THAT INVESTMENT INCENTIVES
ARE NEEDED TO ACCELERATE WIDESPREAD
DEPLOYMENT OF ADVANCED DATA SERVICES.**

Of all the component parts of and functions involved in high-speed, packet-switched, broadband communications, two in particular -- high-speed data networks and advanced access capabilities, such as Digital Subscriber Loop (“xDSL”) -- lag in deployment and innovation. It is for deployment of these specific capabilities that U S WEST seeks relief. As demonstrated in the Petition,³ advanced telecommunications capability continues to be the choke point in data communications across the geographic area served by U S WEST. The Petition conclusively demonstrates that rural and smaller community subscribers and Internet Service Providers (“ISPs”) face substantial chokepoints that substantially slow data traffic. Whereas subscribers in large urban areas can connect to multiple and redundant Points Of Presence (“POPs”), smaller communities are generally served by only a single POP, and congestion or a technical failure at that POP may effectively cut them off from the Internet completely. In addition, as US West has shown, because rural subscribers and ISPs connect to the backbone lower in the hierarchy, their

³ Petition, at 6-22.

connections are generally of lower quality and more prone to congestion than similar connections in urban areas, and far more expensive.⁴ Due to its widely-varying topology and population concentrations, both the backbone congestion in urban areas and the lack of connectivity in smaller communities are likewise of significant concern in the Ameritech region.⁵

III. CERTAIN REGULATORY REQUIREMENTS REDUCE US WEST'S INCENTIVE AND ABILITY TO MAKE THE NECESSARY INVESTMENT.

As noted in the Petition,⁶ U S WEST has already made substantial investments in such facilities, but its incentives to invest further are constrained by regulatory requirements that deny it the ability to meet customers' needs for end-to-end high-speed data services, and add to the costs of investing in high-speed broadband data services. The countereffects of misplaced regulatory policies were recently described in a Hudson Institute paper, which observed:

[W]idespread deployment will require considerable capital investment. Putting capital at risk in a technologically dynamic market place, and a market place where consumer preferences are not known, entails substantial risks. Unfortunately, the government apparatus . . . has not yet adapted to the challenge of the Internet revolution. . . . Given all [the] current economic and regulatory uncertainties, it is not surprising that the local operating companies have been reluctant to put their shareholders' capital at risk to deploy new broadband services in a massive way.⁷

⁴ Petition, at 22-24.

⁵ For a discussion of these issues (as well as examples of increasing congestion on the existing circuit-switched network) in the context of the region served by Ameritech, see Petition of Ameritech Corporation to Remove Barriers to Investment in Advanced Telecommunications Capability, filed March 5, 1998 (hereinafter "Ameritech Petition"), at 6-8.

⁶ Petition, at 6-8.

⁷ Thomas J. Duesterberg, Addicted to Data: The Need for More Bandwidth on the Information Superhighway, Hudson Institute, Jan. 1998, at 1, 9.

To eliminate these barriers to infrastructure investment, US WEST has proposed that the Commission take the steps outlined in its Petition. In view of the low population densities which make it more difficult for US WEST to deploy Internet backbone and xDSL technologies to consumers in smaller and rural markets in that geographic region, each of these steps will eliminate unnecessary regulatory disincentives for further investment in advanced capabilities. They will stimulate the well-known power of the marketplace to attract new investment, helping to bring the promise of advanced telecommunications capability to all consumers in the US WEST region.

The interLATA prohibition eliminates incentives for investment in digital subscriber line (“xDSL”) technology, which can eliminate the most significant choke point in data communications: congestion in LEC networks. Through xDSL technology, customers can use existing copper loops to provide high-speed data communications, and they can do so without interfering with the carriage of voice. This technology thus permits super-fast access to the Internet, while simultaneously reducing congestion on the circuit-switched network. Deployment costs, however, are huge, and the investment risks substantial. This is because consumer demand for xDSL services is untested and competing providers, including cable companies, terrestrial wireless, and satellite providers are entering the Internet access market.

If US WEST is to assume the risks of this significant investment, it must be able to take proper advantage of the benefits offered by this technology through its full participation in the broadband marketplace. As demonstrated in the Petition,⁸ the interLATA prohibition denies it this ability, sharply circumscribing any prospect of a reasonable return. Indeed, the interLATA

⁸ Petition, at 27-35.

prohibition actually diminishes incentives to deploy xDSL technology by denying US WEST the ability to aggregate traffic across LATA boundaries, and raising costs and consumer prices. As noted in Ameritech's Petition,⁹ the interLATA prohibition is grounded in a concept -- the LATA -- that is utterly meaningless in the packet-switched world. Unlike circuit-switched networks, packet-switched networks are connectionless. Instead of establishing an end-to-end transmission path, routers calculate the best routing for a packet at a particular moment in time, given current traffic patterns, and transmit that packet accordingly. Even two packets from the same message may not travel the same physical path through the network: one may travel five miles, and another 500 miles. In this respect, routing over a packet-switched network transcends all notions of geographic boundaries, including LATAs.

These observations were recently echoed in an FCC Office of Plans and Policy Working Paper, which stated that:

Unlike the voice network, which has evolved under the federal-state framework of the Communications Act of 1934, the Internet has no build-in jurisdictional divisions. More important, because the Internet is a dynamically routed, packet-switched network, only the origination point of an Internet connection can be identified with clarity. Users generally do not open Internet connections to "call" a discrete recipient, but access various Internet sites during the course of a single connection. A voice call originates and terminates at two discrete points, and therefore calls can readily be assigned into jurisdictional categories such as local, intraLATA toll, interLATA intrastate, interLATA interstate, intraLATA interstate, and international.

... For an Internet connection, by contrast, the user may have no idea where the sites he is viewing are located. One Internet "call" may connect the user to information both across the street and on the other side of the world. Furthermore, dynamic routing means that packets may take different routes across the Internet to reach the same site, so even the location of the site the

⁹ Ameritech Petition, at 11-12.

user is contacting does not provide sufficient information to identify the routing of the call for jurisdictional purposes.¹⁰

Because the concept of a LATA is meaningless in the packet-switched world, there is no reason for the Commission to base regulatory policy for broadband services on this artificial, anachronistic legal construct. To cling to this construct would be a direct abrogation of the Commission's obligation under section 706(a) to remove barriers to infrastructure investment.

US WEST also identifies two other significant potential barriers to investment in high capacity broadband facilities: the unbundling and resale requirements of section 251(c) obligations which are imposed on incumbent LECs.¹¹ As explained in the Petition, US WEST's deployment of high-speed data network facilities and advanced end-user access technologies such as xDSL will require enormous investments. Under section 251(c)(3), US WEST would be obligated to provide competitors with access to new facilities that were deemed network elements on a Total Element Long Run Incremental Cost ("TELRIC") basis, which permits only the recovery of forward-looking incremental costs. Requiring US WEST to provide elements of its infrastructure on a TELRIC basis in today's competitive marketplace for advanced telecommunications capability would eliminate the incentive to undertake such a major investment. Moreover, as discussed in Ameritech's Petition,¹² applying the unbundling requirements of the 1996 Act to advanced end-user access services such as xDSL would introduce service quality problems into the public switched network. One major customer benefit of xDSL service is that it permits the provision of both high speed data and voice transport services over an existing single copper pair; no second line need be

¹⁰ Kevin Werbach, Digital Tornado: The Internet and Telecommunications Policy, OPP Working Paper Series No. 29, FCC, March 1997, at 45.

¹¹ Petition, at 35-6.

¹² Ameritech Petition, at 23.

purchased, installed or maintained. Since the Act requires that access to network elements be provided “at any technically feasible point,”¹³ a competitor could arguably demand access to only the data bandwidth, or only the voice bandwidth, of US WEST’s loop facilities used to serve a customer. Such frequency unbundling arrangements should not be required. From a technical point of view, such “unbundling” would create ideal technical conditions for crosstalk, interference and other service problems, with the concurrent impossibility of identifying the party responsible for the customer’s service problems -- particularly if different competitors had purchased the data and voice capability of US WEST’s loop facilities. Such arrangements would also be inconsistent with the Commission’s rule that a “telecommunications carrier purchasing access to an unbundled network facility is entitled to exclusive use of that facility . . .”¹⁴

In addition, the resale obligation imposed by the 1996 Act¹⁵ puts US WEST in the position of knowing that it cannot possibly differentiate its advanced data services from those of its competitors. This would discourage innovation in advanced telecommunications capability since US WEST alone would bear the entire risk of investment in each new service offering -- to be sold by competitors across its region as well -- without any assurance of customer acceptance of the new offering. The resale requirement would also create the incentive for competitors to actually refrain from facilities-based competition with US WEST and other Incumbent LECs, a result directly opposite the goals of section 706 in the 1996 Act. This is because, in a resale arrangement as opposed to the use of unbundled network elements, a competitor can choose to

¹³ 47 U.S.C. 251(c)(3).

¹⁴ 47 CFR 51.309(c) (emphasis added.)

¹⁵ 47 U.S.C. 251(c)(4).

risk absolutely no funds whatsoever in a new service. The Commission should forbear from applying the Act's resale and unbundling requirements, as requested in the Petition.¹⁶

**IV. THE REQUESTED RELIEF WILL BE
CONSISTENT WITH THE PUBLIC INTEREST.**

The deregulatory options provided to the Commission pursuant to section 706 are to be exercised "in a manner consistent with the public interest, convenience and necessity". The public interest benefits of a widely-available broadband telecommunications infrastructure, as set forth in the Petition,¹⁷ are well-known and well-documented. It cannot be seriously disputed that economic development on both personal and business levels, technological innovation, enhanced educational effectiveness and research capabilities, increased productivity, and countless other consumer benefits will accrue to Americans when such an infrastructure is deployed on the broad scale envisioned by Congress.

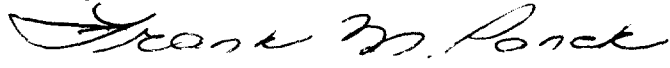
¹⁶ Petition, at 44-51.

¹⁷ See, e.g., Petition, at 38-9, 41-3.

V. **CONCLUSION**

For the reasons set forth above, the Commission should timely grant US WEST the relief it seeks, and implement such other deregulatory measures as the Commission deems appropriate to reach the 1996 Act's policy goal of affording all Americans access to advanced telecommunications capability in a reasonable and timely manner.

Respectfully submitted,

A handwritten signature in cursive script, reading "Frank M. Panek".

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